DRAGON® PRODUCTS COMPANY
Box 191, U.S. Route 1 • Thomaston, Maine 04861

Certified Mail Receipt # 3133

December 1, 2015

Ms. Kathleen Tarbuck, P.E.
Maine Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333

Re: Dragon Products Company, LLC
Quarterly Update for Hydrogen Chloride Compliance Extension

Dear Ms. Tarbuck:

Dragon Products Company, LLC (Dragon) is providing the Maine Department of Environmental Protection (Department) supplemental information regarding the commercial availability of National Institute of Standards and Technology (NIST) traceable, low concentration, calibration gases for the operation of Dragon's hydrogen chloride (HCl) continuous emission monitoring system (CEMS). This submittal is pursuant to the one-year compliance extension for HCl emission limits granted by the Department to Dragon on June 9, 2015.

On May 12, 2015 Dragon requested a one-year compliance date extension of the portland cement hydrogen chloride (HCl) emission limit under 40 CFR §63 Subpart LLL due to the lack of commercially available NIST traceable low range calibration gases. NIST traceable gases are required to confirm CEMS are accurately monitoring emissions through performance audits and daily quality assurance procedures required under the performance testing and quality assurance policies developed by the U.S. Environmental Protection Agency (EPA).

Dragon contacted Dr. Joseph T. Hodges of NIST regarding the availability of NIST traceable HCl calibration gases. Dr. Hodges informed Dragon that, "NIST is currently developing new capabilities to certify HCl/N_2 research gas mixtures (RGMs). We will use two independent methods to provide SI-traceable concentration measurements of gaseous HCl: 1) liquid-ion chromatography (LIC) referenced to the chloride-anion standard NIST SRM® 3182 and 2) gravimetric analysis of an HCl-containing permeation tube using a magnetic suspension balance (Rubotherm Inc.) followed by metered flow dilution. The first method has been demonstrated over the concentration range (1 – 100) ppm. We are now working on extending this method's upper concentration limit via precise dilution techniques. We target measurements up to 1000 ppm by the end of 2015. The second method has been applied for similar measurements of other reactive gases such as ammonia and formaldehyde for concentrations in the range (1 – 50) ppm.

We anticipate the ability to value-assign HCl/N_2 RGMs over a limited concentration range by the end of February 2016. The EPA is aware of our efforts and timeline. Should there be any delays, EPA will be made aware."

In addition, Dragon directly communicated with Mr. Jeff Ryan, senior scientist with EPA's Office of Research and Development regarding this matter. Mr. Ryan informed Dragon that, "The target is to have their [NIST] capabilities established by late Spring. In addition, multiple gas vendors have expressed interest in providing candidate RGMs to NIST prior to that date and are doing what they need to do. In addition, EPA/QAQPS is investigating alternative options that ensure the availability of the necessary commercial NIST traceable reference gases in sufficient time to meet regulatory needs. I'm not certain where that stands, but I think an alternative would also be available in that same late Spring timeframe if indeed an alternative option is needed."

In conclusion, Dragon maintains the need for a compliance extension for HCl emission limits for a minimum of one-year. Dragon will continue to interface with members of NIST, the EPA, and commercial gas vendors and update the Department on a quarterly basis.

If you have any questions regarding Dragon's request please contact me at (207) 593-0147.

Sincerely,

Michael W. Martunas
Environmental Compliance Manager
Dragon Products Company, LLC

c.c Ms. Susan Lancey (EPA Region 1)
Mr. Stephen P. Holt, P.E. (Dragon)